

ABSTRACT

A device and a method for controlling a two-cylinder thick matter pump comprising delivery pistons that are actuated by means of a hydraulic reversible pump (6) via hydraulic drive cylinders that are controlled by said pump in a push-pull manner. For each pressure stroke, the delivery cylinders (50, 50') are connected to a delivery conduit (58) by means of a pipe switch (56). At the end of each delivery stroke, a reversal process of the pipe switch (56) and the reversible pump (6) is triggered. The aim of the invention is to achieve a reliable operation even of single-circuit two-cylinder thick matter pumps. To this end, the pipe switch comprises a position transmitter responding to the pivoting position thereof. According to the invention, at least two cylinder switching sensors are arranged on the working cylinders at a distance from each other, responding to the passing pistons of the drive cylinder, and/or a pressure sensor responding to the pressure course at the high-pressure outlet of the reversible pump is provided. The computer-assisted reversing device comprises a control routine responding to output signals of the position transmitter and to output signals of the cylinder switching sensors and/or the pressure sensors, enabling the programmed control of a control body for adjusting the flow quantity and direction of the reversible pump, and a reversing element arranged in the hydraulic branch of the pipe switch.